

June 16, 2016

Department of Administration Purchasing Division 2019 Washington Street, East Charleston, West Virginia 25305

Re: Pipestem Cabin Wastewater Treatment Plant

Dear Selection Committee:

Chapman Technical Group is extremely interested in providing professional engineering services to the for the proposed wastewater treatment plant for the Pipestem cabins. We are a full-service engineering and architectural consulting firm with offices located in St. Albans, Buckhannon, and Martinsburg, West Virginia, with the ability to perform all of the required work with our current in-house staff of over 40 personnel. Additionally, Chapman Technical Group recently joined GRW, a Lexington, Kentucky-based A/E firm who also has considerable experience and resources in the water and wastewater fields.

Since 1984, Chapman Technical Group has been responsible for the planning, administration, design and construction of more than \$100 million of water and wastewater system improvements projects throughout West Virginia. Our experience with wastewater treatment, collection and pumping facilities has ranged from small on-site systems to over 11.0 MGD facilities and has involved both new construction and rehabilitation/renovation of existing facilities, including infiltration and inflow reduction.

I am enclosing four (4) copies of our Statement of Qualifications outlining our capabilities, representative project experience listings, resumes on the professionals in our firm, and other information regarding our ability to provide professional engineering services in a timely manner and within budget. For additional information on our firm, please visit our website at <a href="https://www.chaptech.com">www.chaptech.com</a>, or GRW at <a href="https://www.grwinc.com">www.grwinc.com</a>.

Chapman Technical Group has the experience, technical qualifications, and commitment to client satisfaction needed to assist you with the successful completion of your projects. We would welcome the opportunity to personally present our firm's capabilities to your selection committee and look forward to hearing from you.

Very truly yours,

200 Sixth Avenue Saint Albans, WV 25177

> 304.727.5501 304.727.5580 Fax

Buckhannon, WV Martinsburg, WV Lexington, KY

www.chaptech.com

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WY PURCHASING DIVISION

CHAPMAN TECHNICAL GROUP

Joseph E. Bird, ASLA Senior Vice President

### STATE OF WEST VIRGINIA Purchasing Division

### **PURCHASING AFFIDAVIT**

MANDATE: Under W. Va. Code §5A-3-10a, no contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and: (1) the debt owed is an amount greater than one thousand dollars in the aggregate; or (2) the debtor is in employer default.

**EXCEPTION:** The prohibition listed above does not apply where a vendor has contested any tax administered pursuant to chapter eleven of the W. Va. Code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

#### **DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Employer default" means having an outstanding balance or liability to the old fund or to the uninsured employers' fund or being in policy default, as defined in W. Va. Code § 23-2c-2, failure to maintain mandatory workers' compensation coverage, or failure to fully meet its obligations as a workers' compensation self-insured employer. An employer is not in employer default if it has entered into a repayment agreement with the Insurance Commissioner and remains in compliance with the obligations under the repayment agreement.

"Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

AFFIRMATION: By signing this form, the vendor's authorized signer affirms and acknowledges under penalty of law for false swearing (*W. Va. Code* §61-5-3) that neither vendor nor any related party owe a debt as defined above and that neither vendor nor any related party are in employer default as defined above, unless the debt or employer default is permitted under the exception above.

WITNESS THE FOLLOWING SIGNATURE:	
Vendor's Name: Chapman Technical Gr	oup
Authorized Signature:	Date: <u>(0-13-14</u>
State of West Virginia	
County of Kanawha to-wit:	.1
Taken, subscribed, and sworn to before me th	is 3th day of Junt , 2016
My Commission expires	20, 2020
AFFIX SEAL HERE	NOTARY PUBLIC Junia W. Sumuel
	Purchasing Affidavit-(Revised 07/01/2012)

Official Seal
Notary Public, State of West Virginia
Jessica D. Gunnoe
506 Coal Fork Road
Charleston WV 25306
My Commission Expires Sept. 20, 2020

### CERTIFICATIONAND SIGNATURE PAGE

By signing below, or submitting documentation through wvOASIS, I certify that I have reviewed this Solicitation in its entirety; that I understand the requirements, terms and conditions, and other information contained herein; that this bid, offer or proposal constitutes an offer to the State that cannot be unilaterally withdrawn; that the product or service proposed meets the mandatory requirements contained in the Solicitation for that product or service, unless otherwise stated herein; that the Vendor accepts the terms and conditions contained in the Solicitation, unless otherwise stated herein; that I am submitting this bid, offer or proposal for review and consideration; that I am authorized by the vendor to execute and submit this bid, offer, or proposal, or any documents related thereto on vendor's behalf; that I am authorized to bind the vendor in a contractual relationship; and that to the best of my knowledge, the vendor has properly registered with any State agency that may require registration.

Chapman Technical Group
(Company)

unhorized Signature) (Representative Name, Tit

(304) 727-5501, (304) 727-5580,

(Phone Number) (Fax Number) (Date)

## ADDENDUM ACKNOWLEDGEMENT FORM SOLICITATION NO.: CEOI DNR1600000022

Instructions: Please acknowledge receipt of all addenda issued with this solicitation by completing this addendum acknowledgment form. Check the box next to each addendum received and sign below. Failure to acknowledge addenda may result in bid disqualification.

Acknowledgment: I hereby acknowledge receipt of the following addenda and have made the necessary revisions to my proposal, plans and/or specification, etc.

	umbers Received: ox next to each adden	dum received)				
X	Addendum No. 1		Addendum No. 6			
	Addendum No. 2		Addendum No. 7			
	Addendum No. 3		Addendum No. 8			
	Addendum No. 4		Addendum No. 9			
	Addendum No. 5		Addendum No. 10	)		
I understand that failure to confirm the receipt of addenda may be cause for rejection of this bid. I further understand that any verbal representation made or assumed to be made during any oral discussion held between Vendor's representatives and any state personnel is not binding. Only the information issued in writing and added to the specifications by an official addendum is binding.						
Company Authorized Si	tal					
Date	<u> </u>					
NOTE: This document proc	s addendum acknow cessing.	ledgement show	uld be submitted	with the b	oid to	expedite

### **EXECUTIVE SUMMARY**



Selecting a firm to provide professional services can be difficult in today's market. Many firms offer computer services and technical skills; however, Chapman Technical Group offers qualities that other firms may lack. Summarized below are the benefits of selecting Chapman Technical Group: Since 1984, Chapman Technical Group has been responsible for the planning, administration, design, and construction of over \$500 million of water, wastewater, and stormwater system improvements projects throughout West Virginia involving both new construction and rehabilitation/renovation of existing facilities. Chapman Technical Group's staff of nearly 40 personnel, including environmental, civil, structural, and electrical engineers, as well as architects, landscape architects, surveyors, technicians, and construction representatives are available to begin work immediately. In late 2013, Chapman Technical Group was acquired by GRW, a Lexington, Kentucky based E/A firm with extensive resources in the municipal water and wastewater fields, an additional asset for Chapman Technical Group. We remain Chapman Technical Group, a wholly owned subsidary of GRW. With offices in north, south, and central West Virginia, Chapman Technical Group can access the entire state on short notice. We are a true West Virginia firm, and our personnel have a wealth of experience in the potable water, wastewater, and stormwater fields in West Virginia, and are adept at dealing with the many challenges our unique terrain presents. Most Chapman Technical Group employees are natives of West Virginia and are graduates of West Virginia colleges and universities. Preparation of preliminary engineering reports and feasibility studies are frequent tasks that Chapman Technical Group regularly provides. Our experience in the water, wastewater, and stormwater engineering fields, our knowledge and experience with all funding agencies, and our working relationship with regulatory agencies all provide invaluable resources towards the successful development of any project.

Technical Group the clear leader in the environmental engineering consulting field in West Virginia.

Our reputation for providing innovative and cost-effective design solutions, our commitment to client

satisfaction, and our proven track record in meeting schedules and budgets have all combined to make Chapman

### **COMPANY OVERVIEW**





Established in 1984, Chapman Technical Group has steadily grown to a diverse firm of professionals, many of whom were educated in West Virginia colleges and universities. We have achieved an outstanding reputation for providing high-quality design projects, while meeting client schedules and budgets and have received numerous awards for our work. In late 2013, Chapman Technical Group was acquired by the Lexington Kentucky based A/E firm of GRW, allowing us to provide a wider range of services while expanding our resources. We are a full-service consulting firm with offices in St. Albans, Buckhannon, and Martinsburg, West Virginia offering an extensive range of professional services.



### Chapman Technical Group offers a broad range of professional services.

- Airport Design
- Architecture
- Civil Engineering
- Interior Design
- Landscape Architecture
- Recreational Facilities
- Roads, Highways, & Bridges
- Site Development
- Space Planning
- Surveying
- Water & Wastewater Systems
- Geospatial

### **AWARDS**



- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS - HONOR AWARD FOR EXCELLENCE IN PLANNING & DESIGN PROJECTS, 2012 - Upper Big Branch Miners Memorial.
- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS - MERIT AWARD FOR EXCELLENCE IN PLANNING & DESIGN PROJECTS, 2012 - Nuttallburg Mine Complex.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2012, Gold Award - Water & Wastewater Category for the Corporation of Shepherdstown Wastewater Treatment Plant Project.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2012, Gold Award - Transportation Category for the Appalachian Regional Airport Project, Mingo County.
- WINNER "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 2013, Large Roadway Category for WV10 Rum Creek to Stollings; 2013, Small Roadway Category for Corridor H Paving WV 42/93 Interchange to 2.8 miles east WV 42/93; 2011, Large Roadway Category for WV10 North Davy Branch to Rum Creek; 2000: Large Bridge Category for WV10 Buffalo Creek Bridge, Logan County, West Virginia.
- WV CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS - MERIT AWARD FOR EXCELLENCE IN ARCHITECTURE, 2009 - Interstate 79 Rest Areas.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2009, Gold Award - Special Projects Category for the Mercer County Airport Runway Safety Area Project
- AMERICAN SOCIETY OF CIVIL ENGINEERS, 2009, National Superior Employer in the Private Sector Award.
- WV CHAPTER, AMERICAN INSTITUTE OF ARCHITECTS -HONORAWARDFOREXCELLENCEINARCHITECTURE, 2008
   -UpshurCountyCourthouseRestorationandRenovations.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2008, Bronze Award - Wastewater Category for the Spring Run State Fish Hatchery Improvements

- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2007, Silver Award - Structures Category for the Mercer County Airport Runway Safety Area Project.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 2003, Gold Award - Water Treatment Category for the City of Fairmont Water Treatment Plant Project.
- FINALIST "COMMISSIONER'S ENGINEERING ACHIEVEMENT AWARD", WVDOT - DIVISION OF HIGHWAYS - 1999: Large Roadway Category for WV10 Buffalo Creek-Taplin Project; 2000: WV10 Buffalo Creek-Huff Junction Project, both in Logan County, West Virginia.
- WV CHAPTER, AMERICAN COUNCIL OF ENGINEERING COMPANIES - ENGINEERING EXCELLENCE AWARD, 1999, Silver Award - Water and Wastewater Category, for the City of Beckley Piney Creek Wastewater Treatment Plant Project.
- ENTREPRENEUR OF THE YEAR AWARD FINALIST, 1999 and 2000, Sharon L. Chapman, President, was named one of twenty finalists in the West Virginia Area Entrepreneur of the Year Award. Sharon was recognized for leading Chapman Technical Group to become one of the most highly regarded engineering firms in the state after the death of her husband and company founder, Harvey R. Chapman.
- "EXPECT THE BEST FROM WEST VIRGINIA AWARD",
   1998, Charleston Regional Chamber of Commerce.
- WV CHAPTER, AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS-HONOR AWARD, 1994, Shrewsbury Street Area Redevelopment Plan, for excellence in planning and design projects. Joseph E. Bird, ASLA, Project Manager.
- "GOVERNOR'S AWARD FOR ENGINEERING EXCELLENCE", 1990, The West Virginia Chapter of the American Public Works Association, in recognition of outstanding Public Works Engineering and Design of Projects within West Virginia.
- "GEORGE WARREN FULLER AWARD", Harvey R. Chapman, P.E., 1984, Robert G. Belcher, P.E., 2001, and Sharon L. Chapman, 2005, American Water Works Association, for distinguished service in the water supply field in the State of West Virginia.

### **ENVIRONMENTAL ENGINEERING**



Chapman Technical Group primarily involves water and wastewater system analysis, planning, design, construction administration, and construction observation services for all aspects of municipal and commercial/industrial projects. Our vast experience in these areas has enabled our firm to become one of the clear leaders in the fields of water, wastewater, and stormwater engineering. This enables the development and betterment of our communities by improving our environment and providing for the public's health, safety, welfare, and convenience.



Chapman Technical Group's experience with water system projects has encompassed new construction as well as renovations and rehabilitation of existing treatment, storage, pumping, and distribution facilities ranging in size from small on-site systems supplying only a handful of people to larger systems supplying approximately 100,000 people. Our firm also provides in-depth comprehensive planning studies, including source of supply studies relating specifically to record and recurring droughts, as well as detailed computerized hydraulic analyses of entire systems in order to identify and eliminate any significant





### **Wastewater Engineering**

Chapman Technical Group's experience with wastewater system projects has encompassed new construction as well as renovations and rehabilitation of existing treatment, pumping, and collection facilities ranging in sizes from small on-site systems to larger systems supplying approximately 100,000 people. Our firm also provides in-depth comprehensive facility planning studies, including extensive field investigations for performing detailed infiltration/inflow analysis and subsequent sanitary sewer system evaluation surveys.



### **Overall Capabilities**

- Feasibility Studies/Facility Plans
- Water and Wastewater Treatment Design
- Water Distribution and Storage
- Wastewater Collection and Pumping
- Computerized Hydraulic Network Analysis
- I/I Analysis/SSES Studies/CSO Plans
- I/I Analysis/SSES Studies/CSO Plans Stormwater
- Management Programs
- Funding and Regulatory Assistance





Corporation of Shepherdstown Wastewater Treatment Plant Post Office Box 248 Shepherdstown, West Virginia

Chapman Technical Group provided design and construction observation services for Wastewater System Improvements project consisting of the renovation and upgrade of the existing wastewater treatment plant in order to meet growth and nutrient removal initiated by the Chesapeake Bay Program. The treatment capacity will increase from 0.40 MGD to 0.80 MGD. The upgrade/renovation consists of a new headworks facility featuring one (1) 3 mm coarse screen, two (2) 2 mm fine screens, screening wash compactor, 2.5 MGD grit removal system, all housed in a 1,120 SF metal building; 800,000 GPD Membrane Bioreactor (MBR) treatment system consisting of converting the existing aeration basins to bioreactor treatment basins, construction of new membrane treatment tanks and MBR equipment housed in a 5,100 SF pre-engineered metal building; new aerobic digester; new UV disinfection unit; non-potable water system; chemical feed equipment; renovate existing plant lift station; relocate existing rotary fan press; new sludge conveying equipment; improvements to the existing Control Building and demolition of existing aerobic digester, break room building, sludge drying beds, existing secondary clarifiers, existing sludge pump building and chlorine contact tank.







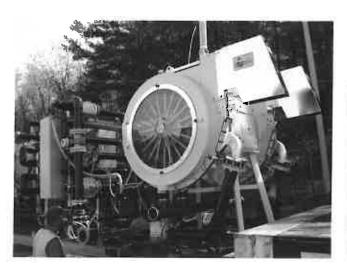


Sanitary Board of Bluefield Wastewater Treatment Upgrades Post Office Box 998 Bluefield, West Virginia





The team of Chapman Technical Group and Willis Engineering was hired in April of 2009 by the Sanitary Board of Bluefield to provide funding application preparation, design, bidding, construction administration, and construction observation services for the Westside Wastewater Treatment Plant Equipment Upgrade project. The Sanitary Board was seeking funding from the WV DEP's Clean Water SRF, Green Reserve program which was funded by the American Recovery and Reinvestment Act (ARRA) of 2009. The Chapman Technical Group / Willis Engineering project team was able to meet the application deadline by preparing and submitting the PER and IJDC funding application in May of 2009. The project involved replacement of existing EPDM membrane fine bubble diffusers, replacement of existing and outdated sludge presses, installation of post-lime feed with mixing screw conveyor, replacement of new aeration blowers, and installation of a dissolved oxygen control system. Each component of the project was evaluated and designed to improve energy efficiency of the facility which will ultimately result in higher quality effluent as well as significant savings on long term operation and maintenance costs.









City of Beckley Sanitary Board Wastewater Treatment Plant 301 South Heber Street Beckley, West Virginia







The Wastewater System Improvements Project consisted of 1) Wastewater Treatment Plant Expansion and Improvements, 2) Whitestick Pump Station Improvements, and 3) Pinecrest Interceptor Replacement. The total project cost was approximately \$11,400,000. Chapman Technical Group provided all design and construction phase services for all three projects. The WWTP Expansion and Improvements, along with the Whitestick Pump Station Improvements, were completed in July 1999. The Pinecrest Interceptor Replacement was completed in October 1996.



City of Beckley Sanitary Board Piney Creek Wastewater Treatment Plant 301 South Heber Street Beckley, West Virginia



The Wastewater Treatment Plant Project consisted of the construction of a new 4.5 MGD WWTP and improvements to the existing 3.5 MGD Piney Creek WWTP. The new WWTP operates in conjunction with the existing WWTP and began operation in July 1999. The design average daily and peak daily flows for the combined treatment plants are now 8.0 MGD and 18.0 MGD, respectively. The new 4.5 MGD WWTP includes: two sequencing batch reactor (SBR) treatment tanks; equalization basin; SBR control/blower building; influent distribution box; rate-of-flow control valve: 18.0 MGD ultraviolet (UV) disinfection system; emergency generator; and site work. Improvements to the existing treatment plant included a new headworks building housing a mechanically-cleaned bar screen, grit removal system, septage receiving unit, and vactor truck dumping station; headworks lift station; plant lift station; belt filter press building with two (2) 1.5 meter combination belt presses and sludge handling pumps, and two sludge holding tanks. Also included was the replacement of the existing mechanical surface system with fine bubble diffused aeration and a 300 HP singlestage centrifugal blower, sludge transfer and digester pumps, combined effluent outfall, and SCADA system. The Beckley Sanitary Board solicited bids and prepurchased the SBR equipment, combination belt filter presses, and the UV disinfection system equipment in advance of the general construction contracts. We prepared all procurement documents and performed the evaluation of all proposals received.















# Silling Associates Huttonsville Wastewater Treatment Plant 405 Capitol Street Charleston, West Virginia

Design and periodic construction observation services for a new 200,000 GPD wastewater treatment facility and a new main interceptor sewer to serve the Huttonsville Correctional Center including stormwater separation and infiltration/inflow reduction. Project included the renovation of portions of the existing primary treatment plant and incorporating these units in the new plant design to provide a cost savings to the owner. Responsibilities also included the interfacing and coordination with all regulatory agencies having jurisdiction.









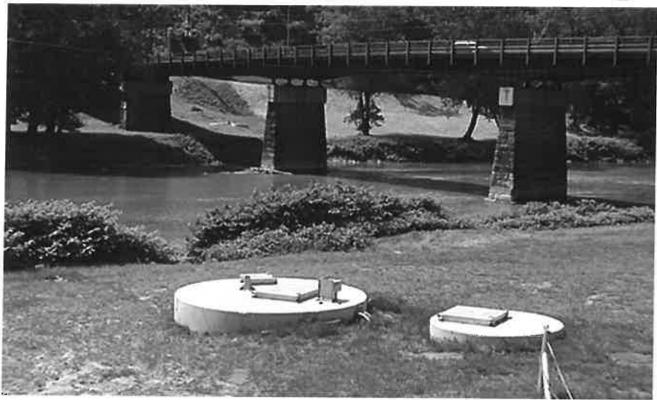


Boone County Public Service District Wastewater Collection System Post Office Box 287 Danville, West Virginia

Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in June 2009. The project consisted of the constructed of a new wastewater treatment plant and collection system renovations to transport wastewater to the plant. The collection system consists of the construction of 437 L.F. of 12", 221 L.F. of 10", 1,328 L.F. of 8" and 55 L.F. of 6" DIP gravity sewer pipe; 2,757 L.F. of 10", 6,831 L.F. of 8" and 5,553 L.F. of 6" PVC gravity sewer pipe; removal and replacement of approximately 270 L.F. of 10" and 1,196 L.F. of 8" PVC; 238 L.F. of 4" DIP ball and

socket force main; 2,825 L.F. of 4" and 2,501 L.F. of 3" PVC SDR 21 force main; 124 L.F. of 3" PVC YELOMINE™ force main; 45 L.F. of 1" PE SDR 11 force main 40 L.F. of 24", 110 L.F. of 20", 80 L.F. of 16", 140 L.F. of 12" and 275 L.F. of 8" steel casing pipe, bore and jack; 20 L.F. of 16" steel casing, open-cut; removal and replacement of 12 existing manholes; 81 new manholes; abandonment of existing sanitary sewer lines, manholes, septic tanks and one package plant; several service connections and reconnections; six (6) lift stations; and miscellaneous surface restoration.





Town of Monongah
Wastewater System Improvements
Post Office Box 9119
Monongah, West Virginia

Construction was completed in June 2000 for the Town of Monongah's wastewater system improvements project. Chapman Technical Group was hired by the Town in 1995, and provided all planning, design, and construction phase engineering services for the project. The Town's system was originally constructed in the 1960's and consisted of a primary treatment facility, three lift stations, and approximately eight miles of sewer collection lines. The majority of the collection system was a combined system, and numerous bypasses and overflows occurred on a regular basis. The treatment facility was unable to meet secondary discharge limits, and the lift stations were in need of major repairs. Upon completion of the project, Monongah's sanitary sewer is being transported to the City of Fairmont for treatment and disposal via a new lift station and over two miles of forcemain. which parallels an area rails-to-trails park. Since the City of Fairmont is master metering all flow received



from Monongah, it was of paramount importance that Monongah's collection system undergo rehabilitation in order to remove stormwater from their collection system. After extensive field investigations, including smoke and dye testing, the most critical problem areas were identified for rehabilitation and corrected. The nearly \$2.5 million project also included the replacement of the two remaining lift stations, including auxiliary power sources at the two major stations, as well as the renovation of Fairmont's existing lift station, which directly accepts the flow from Monongah.





New 0.370 MGD WWTP



**Lift Station Improvements** 



I/I Rehabilitation



Storm Water Separation on US Route 250

City of Belington
Wastewater System Improvements
Post Office Box 926
Belington, West Virginia

Chapman Technical Group provided design and construction observation services for the above project which was completed in 2013. The project consisted of I/I reduction with the rehabilitation of approximately 3.5 miles of the existing wastewater collection system; stormwater separation from sanitary sewers; upgrading capacity of existing lift stations; and the construction of a new 370,000 GPD WWTP (70% increase in capacity). This work was performed in order to reduce/eliminate CSO discharges for compliance with the Town's Long Term Control Plan requirements.





Town of Poca Wastewater System Improvements 100 Main Street Poca, West Virginia

Chapman Technical Group provided design and construction observation services for a sewer collection system rehabilitation project completed in 2013. The project consisted of I/I reduction with the rehabilitation of approximately 1.2 miles of the existing wastewater collection system. Our relationship with the Town of Poca Sanitary Board began in 1987, and as spanned over four (4) decades.















Boone County Public Service District Wastewater Collection System Post Office Box 287 Danville, West Virginia

Chapman Technical Group provided design and construction observation services for the Wastewater System Improvements project that was completed in June 2009. The project consisted of the constructed of a new wastewater treatment plant and collection system renovations to transport wastewater to the plant. The collection system consists of the construction of 437 L.F. of 12", 221 L.F. of 10", 1,328 L.F. of 8" and 55 L.F. of 6" DIP gravity sewer pipe; 2,757 L.F. of 10", 6,831 L.F. of 8" and 5,553 L.F. of 6" PVC gravity sewer pipe; removal and replacement of approximately 270 L.F. of 10" and 1,196 L.F. of 8" PVC; 238 L.F. of 4" DIP ball and

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### **PROJECT TEAM**



### Pipstem Resort State Park

Joseph E. Bird, ASLA Project Officer

Stephen Johnson, P.E. Project Manager

Randal Blankenship, E.t. Project Engineer

Robert Denzie, E.I.
Project Criginaer

Jason Brown, P.S. Professional Surveyor Fred Brown CADD Manager

John Farnham CADD Technician

Lisa Acord

Arden Stull
Sr. Construction Observer

David Mitchell Construction Observer

Charles Cash Construction Observer

### Joseph E. Bird, ASLA

### Vice President Project Officer

Years of Experience: 37 Years with Chapman: 30

#### Education

B.S., Landscape Architecture, 1981, West Virginia University

#### Registration

Landscape Architect: WV, KY

#### **Affiliations**

WV Chapter, American Society of Landscape Architects

#### **Awards**

Honor Award, WV ASLA Shrewsbury Street Development Plan

#### **Projects Include**

St. Albans Streetscape Improvements (St. Albans, WV)

Robert C. Byrd Federal Courthouse Site Design (Beckley, WV)

VA Medical Center Healing Garden and Site Design (Huntington, WV)

Canaan Valley State Park Ski Facility Improvements (Canaan Valley, WV)

Lewisburg L & R Recreation Trail (Greenbrier County, WV)

Smith Street Streetscape Improvements (Charleston, WV)

Sixth Street Streetscape Improvements (Covington, KY)



### **Qualifications**

#### Site Development

Site planning and project management for numerous projects throughout West Virginia ranging from small campus sites to large sites for commercial, government, industrial, and institutional development. Projects include military complexes, campuses, public housing developments and other public facilities.

#### Parks and Recreation

Projects include swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems. Also involved in the design of facilities such as softball fields, fishing access facilities, recreation facilities for prisons, as well as passive recreation areas for public and private clients.

#### Miscellaneous

Other project experience includes the urban planning and development, streetscape design, roadway and storm drainage projects, as well as the project management of numerous major architectural projects throughout West Virginia. His recent relevant project experience includes the design and/or management of major recreation projects including the Beech Fork State Park Campground Improvements; the Beech Fork State Park Cabin Project; the Beech Fork State Park Swimming Pool and Bathhouse: the Blackwater Falls Cabin Projects; the Canaan Valley Golf Course Drainage Improvements Project, and the Canaan Valley Ski Area Improvements Project.

## Stephen M. Johnson, P.E.

### Civil/Environmental Group Manager



Years of Experience: 11 Years with Chapman: 9

#### Education

B.S., Civil Engineering, 2004, West Virginia University Institute of Technology

#### Registration

Civil Engineer: WV, NC, VA

#### **Affiliations**

Water Environment Association WV American Water Works Association WV & VA Rural Water Association Water for People

#### Miscellaneous

National Electric Code Certified, 2011 SDI Certified SCUBA Diver

#### Projects Include

Bluefield Sanitary Board Wastewater System Improvements (Bluefield, WV/VA)

St. Albans Water/Wastewater/Stormwater Improvements (St. Albans, WV)

Elkins Road PSD Water System Improvements (Elkins, WV)

Middle Creek Decentralized Wastewater System Improvements (Tazewell County, VA)

### **Qualifications**

### **Water Systems**

Overall experience includes planning, design, bidding, and construction administration/management of various public and private water system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes distribution systems, river crossings, horizontal directional drills, wells, raw water intakes, transmission lines, booster stations, treatment plants, ground and elevated water storage tank design, painting, and rehab, SCADA systems, computer modeling, treatment process evaluation, and problem troubleshooting in existing systems.

### **Wastewater Systems**

Overall experience includes comprehensive system master plans, design, bidding, construction administration and management of various public and private wastewater system projects throughout West Virginia, Virginia, and North Carolina. Specific project experience includes gravity and low-pressure collection systems, pump stations and force main transmission systems, treatment plant process evaluation and design, trenchless pipeline rehabilitation, bypass pump system design, odor and corrosion control, effluent infiltration ponds, decentralized and alternative on-site disposal systems, and SCADA systems.

### Storm Water Systems

Overall experience includes water management planning and facility design in West Virginia and Virginia. Specific project examples include MS4 compliance plans, NPDES construction storm water permitting, SWPPP preparation, design of bio-retention areas, infiltration basins, ponds, and underground storage/detention facilities.

## Randal D. Blankenship, E.I.

### Civil Engineer



Years of Experience: 3
Years with Chapman: 3

#### Education

B.S., Civil Engineering, 2012, West Virginia University Institute of Technology

Registration

Engineer Intern: WV

#### **Affiliations**

WV American Water Works Association American Society of Civil Engineers WV Rural Water Association Water and Environment Association

#### Projects Include

Bluefield Sanitary Board, VA/WV: Wastewater System Improvements

City of St. Albans, WV: Water/Wastewater System Improvements

City of Winfield, WV: Wastewater System Improvements

Camelot Court Townhomes, VA: Stormwater System Improvements

Leatherwood Subdivision, VA: Stormwater System Improvements

### Qualifications

### **Water Systems**

Overall experience includes planning, and design of various public water system projects throughout West Virginia. Specific project experience includes distribution systems, transmission lines, treatment plants, and problem troubleshooting existing systems.

### **Wastewater Systems**

Overall experience includes design of various public wastewater system projects throughout West Virginia. Specific project experience includes gravity pump stations and force main transmission systems, treatment Plant process evaluation and design.

### Stormwater Systems

Overall experience includes comprehensive system master plans, and design of various public and private stormwater system projects throughout West Virginia. Specific project experience includes drainage basin hydraulic analysis, stormwater collection, detention and BMP system design, construction stormwater management plan preparation, and MS4 permit guidance.

## Robert C. Denzie, E.I.

### Civil Engineer



Years of Experience: 1 Years with Chapman: 1

Education

B.S., Civil Engineering, 2014, Marshall University

Registration

Engineer Intern: WV

**Affiliations** 

Member, American Water Works Association Member, Water Environment Federation

### Qualifications

**Water Systems** 

Overall experience includes planning, and design of various public water system projects throughout West Virginia. Specific project experience includes distribution systems, transmission lines, treatment plants, and problem troubleshooting existing systems.

**Wastewater Systems** 

Overall experience includes design of various public wastewater system projects throughout West Virginia. Specific project experience includes gravity and force main transmission systems, as well as lift stations.

Stormwater Systems

Overall experience includes planning and design of various public and private stormwater system projects throughout West Virginia. Specific project experience includes, construction stormwater management plan preparation, and MS4 permit guidance.

## Jason E. Brown, P.S.

### Professional Surveyor

Years of Experience: 20 Years with Chapman: 5

#### Education

A.S., Land Surveying, 2002, Glenville State College, WV

### Registration

Professional Surveyor: WV, KY, VA

#### **Affiliations**

WV Society of Professional Surveyors



### **Qualifications**

### **Highways**

Established control, site surveying, topographic surveying, courthouse research, drawing production, Right-of-Way Questionnaires, bore hole stake out, and all surveying associated with the initial and final design of WV highways.

### Site Development

Experienced in all types of surveying associated with site development, to include control, topographic boundaries, research, and drawing production. Projects include military complexes, public housing, commercial development, industrial and institutional complexes, churches, resorts and public facilities throughout the state.

### **Parks and Recreation**

Associated surveying for projects including swimming pools, bathhouses, cabins and support facilities for the West Virginia Division of Natural Resources and similar facilities for county and municipal park systems.

### Water/Wastewater/Stormwater Systems

Associated surveying for the design of water systems, sanitary sewer systems, and stormwater systems, including treatment facilities for both private and public systems throughout the state. Also, field experience in the inventory and collection of attribute data using GPS equipment for uploading to GIS databases.

### **Airports**

Associated surveying for the design of runways, airport facilities, lighting, and asphalt design for holding pads for small and large airport facilities throughout the state.

### **Boundary Surveys**

Experienced in full boundary surveys and ALTA surveys for military complexes, private residences, prison facilities, commercial sites, and all boundaries associated with various engineering projects throughout the state.

### Arden L. Stull

### Senior Construction Representative



Years of Experience: 40 Years with Chapman: 14

Education
B.S., Psychology, 1973,
Morris Harvey College
B.S., Environmental Science/Technology,
1998, West Virginia University

### **Qualifications**

### **Construction Observation**

Responsible for supervision of construction observers, field engineering, coordination of subcontractors, assist project engineer, attend client/owner meetings, and administration of several contracts simultaneously. Also construction record keeping, documentation of as-built quantities, line testing, observation of concrete testing, soil density testing, compiling "punch lists," final inspections, review shop drawings, review and approve periodic estimates, and resolve customer complaints. Experience consists of water, wastewater, and airport improvement projects.

Projects Include
City of Lewisburg, WV:
Water System Improvements

Beckley Sanitary Board, WV: Wastewater System Improvements

City of St. Albans, WV: Water System Improvements

City of Fairmont, WV: New Water Treatment Plant

Buckhannon-Upshur County Airport, WV: Runway Extension

Mingo County Airport, WV: New Appalachian Regional Airport

### David R. Mitchell

### Construction Representative



Years of Experience: 17 Years with Chapman: 17

Education

A.S., Applied Science, 1998 Lee College LA Wilson Technological Center, 1982

**Projects Include** 

Mercer County Airport, WV: Runway Safety Area and Piling Wall

Raleigh County Airport, WV: Runway Paving

Eastern WV Regional Airport, WV: Taxiway Paving

Bluefield Sanitary Board, VA/WV: Westside Sewer Plant Upgrade and ADDA Wastewater Plant Upgrade

Elkins-Randolph County Airport, WV: Runway Re-Paving, Lighting, PAPI System

City of St. Albans, WV: Water System Improvements

### Qualifications

### **Construction Observation**

Responsibilities include all aspects of field construction and observation from commencement of construction through project start-up. Maintains field diaries and construction log books; monitors shop drawing approvals and fabrication schedules; observes field testing of completed work; verifies contractor's periodic payment requests; verifies completed site work for as-built drawings; attends construction progress meetings; and updates clients on project progress.

### **Water and Wastewater**

Construction observation for water/sewer line and wastewater treatment plant upgrades.

#### **Airport**

Construction observation for runway, taxiway light installation, paving taxiway and runway, runway safety area, AWOS installation, piling wall, and PAPI installation.

#### Surveying

Assists with various types of field surveying for all types of projects.

## Charles David Cash, Jr.

### Construction Representative



Years of Experience: 25 Years with Chapman: 23

#### Education

WV DOH Portland Cement Concrete Course, 1998 WVDOH Hot-Mix Asphalt Course, 1998

#### Registration

WV Bureau of Public Health, Authorized Sample Collector for New Water Mains, 1997

### Qualifications

#### **Construction Observation**

Responsibilities include all aspects of field construction and observation from commencement of construction through project start-up. Maintains field diaries and construction log books; monitors shop drawing approvals and fabrication schedules; observes field testing of completed work; verifies contractor's periodic payment requests; verifies completed site work for as-built drawings; attends construction progress meetings; and updates clients on project progress.

#### **Field Experience**

Most recently served as Construction Representative for the new Boone County Public Service District Wastewater Treatment Plant construction, the new City of Belington Water Treatment Plant construction, as well as renovations and upgrades to the Corporation of Shepherdstown Wastewater Treatment Plant for Chesapeake Bay compliance.

### Fred L. Brown CADD Manager



Years of Experience: 18 Years with Chapman: 13

#### Education

Drafting/Cadd Degree, 1997, Carver Career Center, WV

### **Affiliations**

Member, National Vocational-Technical Honor Society

#### **Achievements**

Winner, 1996, Carver Career Center VICA Skills Competition for Technical Drafting Judge, 2001, State VICA Skills Competition for Technical Drafting

### Qualifications

### **Bridge and Highway**

Responsible for CADD drafting on base map, site development, construction plan sheets, signal plans, super elevation plans, existing and proposed utilities, utility relocation plans, lighting plans, boring construction plans, typical sections and details, mainline cross sections, bridge plans and details, attenuator details, guardrail plan layout and details, geometric plans, station and offsets of mainline centerline, stationing and curve geometric information, survey reference and control plans, point dump creations.

#### Architectural and Structural

Responsible for CADD drafting on existing and proposed building plans, structural framing plans and details, foundation plans and details, structural scheduling.

#### **Water and Wastewater**

Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans and profiles, booster stations, meter vaults, water system updates for public and private sectors, PRV plans and details.

### Site Design

Responsible for CADD drafting on proposed site layouts, site details and cross sections.

#### **Airport**

Responsible for CADD drafting on existing and proposed taxiways and runways, taxiway signage, hangar layout, and airport master plans.

### Mapping

Responsible for CADD drafting for city, street, and zoning maps.

## John R. Farnham CADD Technician

8

Years of Experience: 41
Years with Chapman: 19

**Education**Ben Franklin Career Center

### Qualifications

### Architectural and Structural

Responsible for CADD drafting on recreational and commercial floor plans, building cross sections and details, structural framing plans, foundation plans and details, and building renovations.

#### **Water and Wastewater**

Responsible for CADD drafting on treatment plants, improvements on existing and new facilities, stormwater plans and profiles, booster stations, meter vaults, water system updates for both public and private sectors, PRV plans and details.

#### **Project Include**

Corporation of Shepherdstown: Wastewater System Improvements

City of Elkins: Water System Improvements

City of Lewisburg: Water System Improvements

Corporation of Shepherdstown: Water Treatment Improvements

### Lisa D. Acord CADD Technician



Years of Experience: 18 Years with Chapman: 17

#### Education

BS, Industrial Technology, 1997, West Virginia Institute of Technology BS, Drafting/Design Engineering Technology, 1995, West Virginia Institute of Technology

### **Qualifications**

### Bridge and Highway

Responsible for CADD drafting of design and preparation of construction plans and details for roadway and bridge work. Involvement includes final design drawings for bridges, signing, pavement marking plans, maintenance of traffic plans, lighting plans, right-of-way plans, geotechnical boring logs and cross-sections.

### **Water and Wastewater**

Responsible for drafting profiles, site layout and proposed grading, booster stations, PRV's, master meter vaults, septic systems, plant valve pit, chemical feed vault, raw water intake and details, and various miscellaneous water treatment plant details.

### Site Design

Drafting for site layout and proposed grading, including site access and parking areas. Also, assisted in construction documents for lake dredging projects, including dredging scheme, disposal site design, and a sediment control plan for both the dredging operations and the disposal site. Performed several presubsidence surveys in conjunction with a deep mines operation.

### **REFERENCES**



1. Honorable Dick Callaway
Mayor
City of St. Albans
1488 MacCorkle Avenue
St. Albans, WV 25177
(304) 727-2971

2. Honorable Joe Drenning Town of Davis
Mayor Post Office Box 207
Davis, WV 26260
(304) 259-5302

3. Ms. Bonnie Osburn
Office Manager
Culloden Public Service District
100 Spanish Oak Drive
Culloden, WV 25510
(304) 743-6349

4. Honorable John Manchester City of Lewisburg
942 Washington Street West
Lewisburg, WV 24901
(304) 645-3776

5. Mr. Shannon Bailey Sanitary Board of Bluefield Executive Director 100 Rogers Street Bluefield, WV 24701 (304) 325-3681

# ABILITY TO MEET BUDGETS & DEADLINES



### Representative Project Budgets

1.	City of St. Albans Water Distribution System Improvements	
	* Estimated Cost	\$6,000,000.00
	* Actual Bid	\$4,853,711.00
	* 19.10% Under Engineer's Estimate	+ 1,000

2. City of Beckley Sanitary Board - Pinecrest Sewer Line Replacement

*	Estimated Cost	\$935,000.00
*	Actual Bid	\$895,000.00
*	1 20% Under Engineer's Fathers	\$055,000.00

\* 4.28% Under Engineer's Estimate

3. City of Lewisburg Water Storage Tank

*	Estimated Cost	\$467,500.00
*	Actual Bid	\$379,000.00
*	19 020/ Under Continue of Call	40.000.00

\* 18.93% Under Engineer's Estimate

4. Corporation of Shepherdstown Water Storage Tanks

* Estimated Cost	\$3,700,000.00
* Actual Bid	\$3,506,848.00
* 5.22% Under Engineer's Estimate	40,500,040.00

5. Huttonsville Correctional Center 150,000 GPD Wastewater Treatment Plant

* Estimated Cost	\$1,290,000.00
* Actual Bid	\$1,249,360.00
	71,270,000,00

\* 3.15% Under Engineer's Estimate

### Representative Project Budgets

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		Project Cost	Scheduled Completion	Actual Completion	
1.	Corporation of Shepherdstown Lowes Bypass (Green Reserve)	\$376,000	60 days	45 days	
2.	St. Albans 1.5 MG Steel Water Tank	\$335,000	90 days	30 days	
3.	Culloden PSD Water Storage Tank	\$250,000	90 days	30 days	
4.	Elkins Road PSD Water System Improvements	\$3,500,000	120 days	120 days	
5.	Greater St. Albans PSD Sewer System	\$3,838,000	270 days	180 days	
6.	Town of Davis Stormwater System Improvements (Green Reserve)	\$271,000	60 days	30 days	
7.	Clay - Roane PSD Water System	\$274,000	120 days	45 days	

### TECHNOLOGY RESOURCES



To better serve the growing needs of the contemporary client, Chapman Technical Group has the following hardware and software selections available to its staff...

#### Backbone

St. Albans Local Area Network (LAN): 96 Node Category 5E Twisted Pair Ethernet, 4 Hewlett Packard Gigabit Ethernet Managed Hubs, 10G Fiber Trunk Connecting the Server Room to Network Closet

Buckhannon Local Area Network (LAN): 40 Node Category 5 Pair Ethernet, 2 Hewlett Packard Gigabit Ethernet Hub

Martinsburg Local Area Network (LAN): 12 Node Category 5 Twisted Pair Ethernet, 1 Hewlett Packard Gigabit Ethernet Hubs,

Corporate Wide Area Network (WAN): 25 Mbs Metro E Fiber WAN, T1/Frame Relay Digital Communications Link, 2-7.1 Megabit ADSL Lines (back up), 2 Cisco 1841 Routers, 2 Sonicwall firewalls, Voice over IP Telecommunications between offices

#### File Servers

HP x 1800 File Server (St. Albans), Sun Fire V-240 - UNIX based file server (St. Albans), HP x 1400 File Server (Buckhannon)

#### Peripherals

2 Oce' TDS 400 Digital Wide Format Printers, 2 Hewlett Packard Designjet Plotters, 5 Hewlett Packard Laserjet Printers, Contex HD 3650 Color Scanner

### Workstations & Computers

17 Xeon Systems with minimum 32 GB ram and dual 24" monitors, 17 Core 2 Systems with a minimum 8 GB ram and 17" monitors, 6 Notebook Computers

#### Accounting

Deltek Vision v 7.2, CCH Electronic Tax Library, Microsoft Access 2013

#### Operating Systems

Sun Solaris v 10, Microsoft Windows 8.1 Professional, Microsoft Windows 7 Professional, Microsoft Windows Server 2008 R2

#### Marketing

Adobe In Design CS6, Adobe Photoshop CS6, Adobe Illustrator CS6, Adobe Acrobat Professional X, Microsoft PowerPoint 2013

#### Spreadsheet/Word Processing Microsoft Office 2013

#### Transportation Engineering

PCAPAV - Concrete Thickness Design, Comp Air - Life-Cycle Cost Comparison for Airports , Airport - Thickness Design of Asphalt Pavements , FAA Airport Design - Geometric Design of Airports FAA Pavement Design - Thickness Design of Rigid and Flexible Pavements for Airports, Airport - Concrete Thickness Design, Autodesk Civil 3D 2015

#### CAD Production

AutoCAD 2015, Bentley MicroStation v 8i



### Environmental Engineering

Bentley WaterCAD v8i 8.11 with AutoCAD, Bentley StormCAD v8i 8.11, Bentley Flowmaster PE v 8.11, Bentley Culvert Master v 3.03, Bentley NWS - Dam Breach Wave Analysis, KYPIPE3 - 4,000 Pipe Version, Sigma Flow Analysis and Data Collection Equipment, Uniflange - Pipe Thrust Restraint Design Program, CIPP Designer 2.0

### Structural Engineering

Bentley Ram Elements, RISA - 3D v8.0, Enercalc Structural Engineering Library v 6, Merlin Dash - Straight Girder Bridge Design v 3.0, GL Sizer - AITC Glulam Member Design, American Institute of Architects Masterspec Specifications System

 Site, Civil Engineering, & Landscape Architecture Autodesk Infrastructure Design Suite 2015, Autodesk Raster Design 2015, Trimble Sketchup Pro 2014

#### Architectural

AutoCAD Revit Architecture 2015, AutoDesk Building Design Suite 2015, AutoDesk Navisworks 2015, American Institute of Architects Masterspec Specifications System, Herman Miller - CAD Symbol Libraries, Steelcase CAD Furniture Symbol Library, Anderson Window - CAD Symbol Library, Butler Manufacturing - CAD Details

#### Geospatial

1 Mageilan Mobile Mapper CX Sub Meter, ESRI Arc GIS 10.2.2, Autodesk Map 3D 2015, Autodesk Raster Design 2015

#### Surveying

Field Equipment: 1 Topcon Hiper GA Duel Frequency (base and rover) RTK package, 1 Topcon PS 3 Robotic Total Station, 1 Leica Sprinter 100M Digital Level, 1 Topcon AT-G3 Auto Level

Date Collection & Surveying Applications: 1 Carlson Surveyor + Carlson Surv CE Software Version 2.52, 1 Carlson Explorer II with Carlson Surv CE Software Version 2.05, Carlson Survey 2015, Autodesk Civil 3D 2015, Topcon Tools V.8 (GPS post processing)